**Feedback - Content**

- Show logic & assumptions
- Use valid target customers
- Derive Wants = “should”; constraints = “must”
- Derive lessons learned from benchmarking
- Derive Metrics = ways to measure “wants”
- Derive Target Values = Engr Requirements
- Summarize why wants, metrics, target values chosen
- Identify, design, analyze critical subsystems
- Generate Concepts
- Explain tradeoffs among serious alternatives
- Derive “Decisions”; Select “Best” Concept
- Show figure of selected concept in body of report!

---

**Feedback - Form**

- **Always deliver your best effort**
  - **Context** – what is this report for?
  - **Use Graphics!**
    - Make Figure title say point to be made.
    - Show jar in place to have lid removed
  - **Embed important Figs, use Fig. #’s, AND TALK TO FIGURES**
  - **Make use of Writing Center**
  - **Always spell-check, proof-read, make user-friendly**
  - **Write in 3rd person. Avoid “I, we, my, …, etc”**
  - **Always read out loud!**
**Feedback - Other**
- Logical order of tasks?
- Validity of Customers/Wants/Metrics?
- Benchmarking
  - Photos, Data, Lessons Learned?
  - Patents, References (use Author-Date)?
- Select Best Concept by Metrics/Target Values
- Don’t make reader search for selected concept! Make it the center piece of your proposal. Talk about it.
- Check sensitivity of decision to inputs?

**Feedback-Peer Evaluations**
- Submit peer evaluations on time!
- Failure to do so results in you getting a 55, and your team mates getting an 85, in place of what you may have intended
- Justify any evaluation other than an 85
- Extremely high or low evaluations will be adjusted by instructor!
- No peer evaluation will be accepted late

---

**Phase 2 – Big Picture**
- **Intro – Summarize Project**
- **Detail Design**
  - Design Freeze by Ph2 Draft Submittal
  - Engr Drawings & Assembly Drawings with Bill of Materials and Notes
  - Analyses (Must include FEA of critical component)
  - Risk Reduction
  - Plan Forward
Phase 2 - Intro

- Background
- Customers/wants - updated
- Benchmarking
  - Lessons, metrics, range of wild ideas
- Metrics & Target Values - How?, Why?
- Summary of Concept Selection

Phase 2 - Detailed Design

- Flow Chart of Decisions?
- Subsystems & Interactions
- Critical Metrics, Target Values
  - Include deflection, strength, fatigue, vibration...
- List Assumptions!
- Easy/Tough Choices & Compromises
- Safety Factor/Margin Summary

Phase 2 - Audience Issues

- Coherence is #1 task
- Graphics (shrink sizes)
  - Re-do sketches
  - Intersperse figures in body of report and talk to figures!
- Schedule - Roll up earlier sub-tasks
- Drawings - Need Bill of Materials
- (Backup Slides - Key to Good Q/A)
<table>
<thead>
<tr>
<th>MEEG 304 Performance Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 2 - Concept Design</strong></td>
</tr>
<tr>
<td><strong>Senior Design (for reference)</strong></td>
</tr>
<tr>
<td><strong>MEEG 304</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td>Continue development of the final concept design among various alternatives, and validate based on: 1) Design method; 2) assumptions and hypothesis; cost; 3) constraints; 4) design trade-offs established in the context of applicable technology benchmarks - Design and/or Dyna and Little.</td>
</tr>
<tr>
<td>55%</td>
<td>Perform detailed design of all subsystems in compliance with their specific design specifications. Validate the detailed design. Include at least 1 complete FEA model.</td>
</tr>
<tr>
<td>10%</td>
<td>Describe the plan that was followed.</td>
</tr>
<tr>
<td>10%</td>
<td>Use MS Project to explain the path forward.</td>
</tr>
<tr>
<td>10%</td>
<td>Function as a cohesive team; Deliver Weekly Updates, Meeting Agendas, Minutes, &amp; Peer Evaluations.</td>
</tr>
<tr>
<td>10%</td>
<td>Demonstrate timely communication in Online Logbook.</td>
</tr>
<tr>
<td>10%</td>
<td>Deliver persuasive Design Report with engineering drawings, purchased parts list, &amp; engineering analyses.</td>
</tr>
</tbody>
</table>

*Design of the concept was produced. It describes what the concept looks like and how it will function in the context of the sponsor's business, and which continues to be aligned with customer needs and existing with target values. Target in the context of relevant technology benchmarks. Critical performance/cost aspects of the design were modeled to further validate the concept.*